

NOAA and CIMMS scientists helped develop the Warning Decision Support System. During 4 years of testing the system dramatically helped forecasters produce more timely and reliable warnings. The average lead time for tornado warnings increased from 9 to 17 minutes and the probability of detection of tornadoes increased from an average of 58% to



Preparing for an ozonesonde launch near McM urdo Station, Antarctica. Major expeditions have been sent from CIRES to the Himalayas to study continental drift, Australia and Canada to study winds in atmospheric and climate dynamics, Greenland to study the behavior and characteristics of ice and glaciers, and Antarctica to study the expanding ozone hole.

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Joint Research Institutes

Centers of Excellence in Science

What do the NOAA Research Joint Institutes do?

The The eleven Joint and Cooperative Institutes bring together the resourThe eleven research-orientedresearch-oriented university or institution, NOAA Researchresearch programs. Tograms. The programs. They promote collaboration between scientists so that academic and government researchers can work together learn about and apply their knowledge to environmental processes.

The The NOAA Joint Research Institutes are centers of excellence The NOAA Joint toto understanding the Earth is to understandi

TheseThese theme areas, each with significant implications for human sociThese the interrelated, interrelated, and scientific progress will interrelated, and scientific progress was and and between disciplines. In each case, progress will depend between disciplines basicbasic process studies, the development and deployment of technological systems for for long-term observation, and the development of mofor long-term observation, and understanding understanding of the underlying processes and that incorporate information the observations.

Staff and Funding:

The The NOAA Research Joint Institutes are a \$68 million dollar NOAAThe NOAA I supporting 901 researchers across the country.

For more information please contact:

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http://www.oar.noaa.gov/joints/joints.html



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Cooperative Institute of Climate and Ocean Research

(CICOR)
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Cooperative Institute for Limnology and Ecosystems Research (CILER)

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